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16/00(US). PARK, Pyong, Woo [KR/US]; 1277 Commonwealth
Avenue, Allston, MA 02134 (US).

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(74) Agents: RESNICK, David, S. et al.; Nixon Peabody LLP,
101 Federal Street, Boston, MA 02110 (US).

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amendments.(71) Applicant (*for all designated States except US*): CHIL-
DREN'S MEDICAL CENTER CORPORATION
[US/US]; 300 Longwood Avenue, Boston, MA 02115
(US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): BERNFIELD, Mer-
ton [US/US]; 25 Brimmer Street, Boston, MA 02108-1040*For two-letter codes and other abbreviations, refer to the "Guid-
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(54) Title: METHOD FOR TREATING AND PREVENTING BACTERIAL INFECTION

(57) Abstract: The present invention provides methods and compositions for treating bacterial infections, especially infections by opportunistic pathogens in a subject by administering a compound that inhibits syndecan-1 shedding. The invention is based on the discovery that two diverse opportunistic pathogens, *S. aureus* and *P. aeruginosa*, enhance syndecan-1 shedding and that this shedding is critical for *Pseudomonas* pathogenesis via the respiratory tract. The discovery is also based on the surprising finding that inhibition of syndecan-1 shedding prevents *Pseudomonas* pneumonia in a mammalian model. The *P. aeruginosa* shedding enhancer has been purified and identified as the mature 20 kDa LasA protein, a known virulence factor of *P. aeruginosa*.